



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/282,450 | 03/31/1999 | HIROAKI KAWAI | 990295 | 8632 |

23850 7590 03/07/2002

ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW.
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

LEE, DIANE I

ART UNIT PAPER NUMBER

2876

DATE MAILED: 03/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

61

Office Action Summary

Application No.
09/282,450

Applicant(s)
KAWAI et al.

Examiner
Diane Lee

Art Unit
2876



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Dec 31, 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

DETAILED ACTION

1 1. Receipt is acknowledged of the Amendment filed 31 December 2001. Claims 1-2, 7-12 have been
2 amended and no claims have been newly added. Currently claims 1-12 are pending in this application.

Claim Objections

5 2. Claim 5 remains objected to because of the following informalities:

6 (a) Re claim 5, line 3: "the entire" should be changed to --an entire--.

7 Appropriate correction is required.

Claim Rejections - 35 USC § 103

10 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections
11 set forth in this Office action:

12 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this
13 title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a
14 whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said
15 subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16 This application currently names joint inventors. In considering patentability of the claims under 35
17 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at
18 the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised
19 of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not
20 commonly owned at the time a later invention was made in order for the examiner to consider the
21 applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

22 4. Claims 1-4 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minasy et al.
23 [US 4,684,930-referred as Minasy].

1 Re claims 1-4: Minasy discloses a commodity information management system (supermarket
2 checkout counter 10) for managing a commodity as well as security thereof based on a bar code and a tag
3 (target 30) attached to the commodity (merchandise 14) (see the abstract, col. 3, lines 30+, col. 4, lines 38+,
4 and figures 1-2), the system comprising:

5 a bar code reader 40 for reading the bar code (see col. 4, lines 38+ and figure 1);

6 a deactivator (a target deactivator 42, 44) provided downstream from the reader (just beyond the bar
7 code reader on the checkout counter) for deactivating the tag after the bar code is read by the reader (see col.
8 4, lines 54+);

9 a magnetic detector (a pair of spaced apart antenna 20, 22 in the interrogating zone 24 which leads to
10 the store exit) provided downstream from said deactivator (the antenna in the interrogating zone located
11 beyond the counter) for detecting effectivity of the tag, i.e., magnetic field of the tag (see col. 3, lines 42-col.
12 4, lines 16 and figure 1);

13 a notifying unit (a light 28 and/or an audible alarm) for notifying an operator of a detection result by
14 the detector (i.e., by producing an alarm such a light 28 or an audible alarm) (see col. 3, lines 53+ and figure
15 1);

16 Minasy teaches that the tag that is attached to the commodity having a thin elongated strip of
17 saturable material (see col. 4, lines 17+). As the commodity is place on the counter and carried by the
18 conveyor belt 12 in the direction indicated by an arrow "A" toward the cash register 16 positioned along side
19 of the counter, the commodity is passed over the bar code reader and the tag deactivator. The commodity is
20 carried though the interrogation zone of the exit passageway to detect the effectivity of the tag by the detector,
21 and the notifying unit is activated only when the tag is still activated. Since the tag provides a security
22 measure against shoplifting in the store (i.e., taking out the commodity from the store without a payment), the

1 tag clearly performs the function of security management at an exit of the store and assures that payment for
2 the commodity attached thereon is done.

3 Although Minasy teaches the detector provided downstream from the deactivator for detecting
4 affectivity of the tag, he fails to teach or fairly suggest the detector being provided adjacent to the deactivator.

5 However, it would have been obvious to an artisan of ordinary skill in the art at the time the
6 invention was made to modify the system of Minasy by placing the detector right next (i.e., at adjacent) to the
7 deactivator in order to immediately notify the affectivity of the tag to the operator before the customer
8 approaching the exit gate. Due to the fact that the detector in the system of Minasy is utilized as a theft
9 detection system to notify the operator when the affectivity of the tag is still activated, such modification
10 would have provided an operator to immediately identify and/or correct the transaction before next
11 transaction is started (i.e., before a transaction for the next customer is started).

12 Re claims 10-11: wherein the tag is made of a magnetic material formed in a thin plate (see col. 4,
13 lines 17-24 and figure 2)

14 Re claims 9 and 12: Minasy is silent with respect to the specifics of an output unit for outputting a
15 deactivating section-drive signal for driving a deactivating section which deactivates a security tag attached to
16 the commodity.

17 Minasy teaches that the commodity is carried toward the tag deactivator by the conveyor belt and/or
18 by the operator when the bar code reader reads the bar code data. The deactivator causes the tag to become
19 deactivated so that commodity can be carried through the detector without producing an alarm (see col. 4, line
20 54-col. 5, line 4). He also states that the deactivator includes a deactivator cylinder 44 with a plurality of
21 permanent magnets 45 arranged with their poles near the surface of the deactivator so as to produce a pattern
22 of oppositely directed magnetic fields (see col. 5, lines 30+ and figures 4-5).

1 It would have been obvious to an artisan of ordinary skill in the art at the time the invention was
2 made to recognize that a plurality of permanent magnets which produce a pattern of oppositely directed
3 magnetic fields is functionally equivalent to an output unit outputting a deactivating section-drive signal for
4 driving a deactivating section for the purpose of deactivating the tag of the commodity so that the detecting
5 unit will not activate the alarm mechanism. Accordingly, such modification would have provided Minasy
6 with an additional means for preventing a false alarm. Therefore, it would have been an obvious expedient.

7
8 5. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minasy in view of
9 Ruppert et al. [US 5,640,002-referred as Ruppert]. The teachings of Minasy have been discussed above.

10 Re claims 5-6: Although the detector and the notifying unit of Minasy provides the claimed function
11 of the control unit for making a visual and/or an audible report (i.e., notifying the detection result by
12 outputting a signal to activate/inactivate the alarm mechanism) to the effect that the security is not released
13 (i.e., the tag is still activated), Minasy does not disclose the system having a host terminal for controlling the
14 operation of the entire system and a reporting unit for reporting the result of detection to the host terminal as
15 an electronic data.

16 Ruppert discloses a commodity information management system for managing commodities (e.g.,
17 supermarket products 500, 504) based on a bar code 506 and a magnetized security tag 507 affixed to the
18 product (see col. 32, lines 1+ and figure 27). The system includes:

19 a deactivating unit 518 for deactivating the security tag (see col. 36, lines 24+ and figure 30);

20 a detector 516 having a determining unit 538 for determining whether or not security tag has been
21 deactivated according to the detection result (see col. 36, lines 18 and figure 31);

1 a host terminal 509 in communication with the check out terminal 501, the deactivator, and the
2 detector for controlling operation of the entire check out system such as monitoring and managing the
3 transaction process including validation, deactivating, updating, and etc. (see figures 27+); and

4 wherein the detection notifies the detection result by setting the alarm and transmitting the signal
5 (i.e., electronic data) to the host terminal via signal line 524 (see figure 27).

6 In view of Ruppert's teaching, it would have been obvious to an artisan of ordinary skill in the art at
7 the time the invention was made to incorporate the conventional host terminal and its security management
8 function in the system of Minasy in order to provide a system that has a control manager that monitors and
9 controls the entire transaction process and to improve the security measures of the merchandise in the store
10 from theft or the like. Therefore, such modification would have enhanced the inventory control and tracking
11 operation of an entire store.

12 Re claim 7: Minasy does not disclose a control unit for making a report when it is determined that the
13 tag has not been deactivated to the effect that the security is not released to the host terminal, and also
14 sending a notice to the effect a retry of checking deactivation of the tag is requested to the operator.

15 Ruppert teaches that in response to the detected result, the tag transmitter 536 as a control unit for
16 making a report to the effect that the security is not released to the host terminal when it is determined by the
17 detecting unit that the tag has not been deactivated. Upon host terminal receiving the notification, the host
18 sends a message to the checkout station to request an audit of the contents with the itemized list thereby
19 requesting t the operator to recheck the transaction process including the retry of checking the deactivation
20 process.

21 In view of Ruppert's teaching, it would have been obvious to an artisan of ordinary skill in the art at
22 the time the invention was made to modify the system of Minasy to include a well-known control unit for

1 making a report when it is determined that the tag has not been deactivated to the effect that the security is
2 not released to the host terminal, and to send a notice to the effect a retry of checking deactivation of the tag is
3 requested to the operator in order to validate the transaction, to increase the security, and to enhance the
4 transaction process. Such modification would improve the quality of transaction process. Accordingly, it
5 would have been an obvious expedient, well within the ordinary skill in the art.

6
7 *Allowable Subject Matter*

8 6. Claim 8 is allowed.

9 7. The following is a statement of reasons for the indication of allowable subject matter: the best prior
10 art of the record, Minasy and Ruppert, taken alone or in combination, fails to specifically teach or fairly
11 suggest the control unit enables only the function of the detector during the period of time until the
12 determining unit determines that the security tag is deactivated when a retry of checking deactivation of the
13 tag is request, as set forth in the claim.

14
15 *Response to Arguments*

16 8. Applicant's arguments filed 31 December 2001 have been fully considered but they are not
17 persuasive.

18 9. Applicant argues that the detector in the Minasy's system is a walk-through antenna panel, and the
19 detector in the present invention is in addition to the walk-through detector at the store exit. It is noted that
20 the features upon which applicant relies (i.e., the detector in the present invention is in addition to the walk-
21 through detector at the store exit) are not recited in the rejected claim(s). Although the claims are interpreted

1 in light of the specification, limitations from the specification are not read into the claims. See *In re Van*
2 *Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3 10. In response to applicant's argument with respect to the specific arrangement of the detector (i.e.,
4 detector provided downstream and adjacent to the deactivator on the same counter surface) and that Minasy et
5 al. and Ruppert et al. fails to teach, mention or suggest that arrangement; the examiner recognize that the
6 system of Minasy clearly includes the detector provide downstream from the deactivator, Minasy and Ruppert
7 does not specifically show the claimed arrangement (i.e., the detector is provided adjacent to the deactivator).
8 However, the detector in the system of Minasy is utilized as a theft detection system to notify the operator the
9 effectivity of the tag (i.e., notifying the operator if the detector detects the tag which is still activated at the
10 time when the customer with the commodity is leaving the store), it would have been obvious to an artisan of
11 ordinary skill in the art at the time the invention was made to modify the system of Minasy by placing the
12 detector right next (i.e., at adjacent) to the deactivator in order to immediately identify the effectivity of the
13 tag and to notify the operator before the customer approaching the exiting the gate. Such modification would
14 have provided an operator to immediately validate the payment activity and deactivation of the commodity is
15 properly done when there is no alarm and to provide an opportunity to quickly correct the effectivity of the
16 tag when the alarm is activated (i.e., before next transaction or next customer in queue is started).

17
18 **Conclusion**

19 11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.
20 Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the
21 extension of time policy as set forth in 37 CFR 1.136(a).

1 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the
2 mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of
3 this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened
4 statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and
5 any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory
6 action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date
7 of this final action.

8 12. Any inquiry concerning this communication or earlier communications from the examiner should be
9 directed to *Diane I. Lee* whose telephone number is (703) 306-3427. The examiner can normally be reached
10 between the hours of 7:00AM to 4:30PM Monday thru Thursday and every other Friday (first Friday of the
11 bi-week).

12 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael
13 Lee, can be reached on (703) 305-3503. The fax phone number for this Group is (703) 308-7722.

14 Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132
15 or which otherwise require a signature, may be used by the applicant and should be addressed to
16 [michael.lee@uspto.gov].


17 All Internet e-mail communications will be made of record in the application file. PTO employees
18 do not engage in Internet communications where there exists a possibility that sensitive information could be
19 identified or exchanged unless the record includes a properly signed express waiver of the confidentiality
20 requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published
21 in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Serial Number: 09/282,450
Art Unit: 2876

Applicant(s): KAWAI et al. (235/462.13)
Representative: William L. Brooks (Reg. No. 34,129)

Page 10

1 Any inquiry of a general nature or relating to the status of this application or proceeding should be
2 directed to the Group receptionist whose telephone number is (703) 308-0956.

3
4 
5 D. Lee
6 Art Unit 2876
7 March 6, 2002


MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800